

C. Amendments to the Claims.

1. (Currently Amended) A method, comprising:

forming a stop layer~~that is;~~

forming a contact with chemical-mechanical polishing that removes a
conductive layer with the stop layer as a conductive layer removal stop ~~in a
contact formation step and;~~and

performing a borderless contact etch with the stop as an etch stop in
~~at~~the borderless contact etch.

2. (Original) The method of claim 1, wherein:

the stop layer is a composite layer that includes at least two different
materials.

3. (Currently Amended) The method of claim ~~3~~2, wherein:

the stop layer includes a layer comprising silicon dioxide and a layer
comprising silicon nitride.

4. (Currently Amended) The method of claim ~~3~~2, wherein:

the stop layer includes a layer comprising silicon dioxide and a layer
comprising silicon oxynitride.

5. (Currently Amended) The method of claim ~~3~~2, wherein:

the stop layer includes a layer comprising silicon oxynitride and a layer
comprising silicon nitride.

6. (Original) The method of claim 2, wherein:

the stop layer includes a first layer that is less than 1500 angstroms thick
and a second layer that is less than 1500 angstroms thick.

7. (Cancelled) The method of claim 1, wherein:

the contact formation step includes chemical-mechanical polishing.

8. (Original) The method of claim 1, wherein:

the borderless contact etch includes a reactive ion etch.

9. (Currently Amended) A method, comprising:

removing a first conducting layer formed over a stop layer having a contact hole formed therein, with the stop layer as a removal stop to form a contact structure;

forming a conducting interconnect structure after removing the first conducting layer, the conducting interconnect structure contacting the contact structure; and

etching a borderless contact pattern into an insulating layer formed over the stop layer, with the stop layer as an etch stop, the borderless contact pattern exposing at least a portion of the conducting interconnect structure.

10. (Original) The method of claim 9, wherein:

removing a first conducting layer includes chemical-mechanical polishing.

11. (Cancelled) The method of claim 1, further including:

forming a conducting interconnect structure after removing a first conducting layer; and

the borderless contact pattern exposes at least a portion of the conducting interconnect structure.

12. (Cancelled) The method of claim 11, wherein:

removing a first conducting layer with the stop layer as a removal stop forms a contact structure; and

the conducting interconnect structure contacts the contact structure.

13. (Currently Amended) The method of claim 9, wherein:

the insulating layer includes silicon dioxide; and

the stop layer includes a layer of $\text{Si}_x\text{N}_y\text{O}_z$, where X and Y are integers **greater than zero** and Z is an integer that can include zero.

14. (Original) The method of claim 13, wherein:

5 the stop layer further includes a layer of silicon dioxide.

15. (Currently Amended) A method, comprising:

forming a stop layer between a first insulating layer and a second insulating layer having a substantially slower removal rate than a conducting material in a step that removes **essentially all of** the conducting material **above a top surface of the stop layer to expose the stop layer and retains the conducting material below the top surface of the stop layer to** ~~and~~ forms a contact in the first insulating layer **and, the stop layer having** a substantially slower removal rate than the second insulating material in an etch step that forms a borderless contact pattern in the second insulating layer.

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16. (Original) The method of claim 15, wherein:

a material removal step includes chemical-mechanical polishing.

20 17. (Currently Amended) The method of claim 15, wherein:

a conducting material includes a metal and the stop layer includes $\text{Si}_x\text{N}_y\text{O}_z$, where X and Z are integers **greater than zero** and Y is an integer that can include zero.

25 18. (Original) The method of claim 17, wherein:

a second insulating layer includes silicon dioxide and the stop layer further includes silicon nitride.

19. (Original) The method of claim 15, wherein:

30 the first insulating layer includes silicon dioxide having a concentration of phosphorous dopant that is greater than 5% by weight.

20. (Original) The method of claim 19, wherein:

the stop layer includes a layer of substantially undoped silicon dioxide.